Outdoor Nema Enclosure
For Dotworkz CoolDome Power Supply
Product Code: NM-CDPS

User Manual

Revision June 2008

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LIMITED WARRANTY FOR DOTWORKZ SYSTEMS INC. PRODUCTS **DOTWORKZ SYSTEMS INC.** *warrants this Product to be free from defects in material or workmanship, as follows:*

PRODUCT CATEGORY	PARTS	LABOR
All Enclosures and Electronics	One (1) Year	One (1) Year
Power Supplies	One (1) Year	One (1) Year
Accessory Brackets	One (1) Year	One (1) Year

During the labor warranty period, to repair the Product, Purchaser will either return the defective product; freight prepaid, or deliver it to Dotworkz Systems Inc. San Diego, CA. The Product to be repaired is to be returned in either its original carton or a similar package affording an equal degree of protection with a RMA # (Return Materials Authorization number) displayed on the outer box or packing slip. To obtain a RMA# you must contact our Technical Support Team at **866-575-4689**, Dotworkz Systems will return the repaired Product freight prepaid to Purchaser, Dotworkz Systems is not obligated to provide Purchaser with a substitute unit during the warranty period or at any time. After the applicable warranty period, Purchaser must pay all labor and/or parts charges,

The limited warranty stated in these product instructions is subject to all of the following terms and conditions:

1. NOTIFICATION OF CLAIMS: WARRANTY SERVICE: If Purchaser believes that the Product is defective in material or workmanship, then written notice with an explanation of the claim shall be given promptly by Purchaser to Dotworkz Systems but all claims for warranty service must be made within the warranty period. If after investigation Dotworkz Systems determines that the reported problem was not covered by the warranty, Purchaser shall pay Dotworkz Systems for the cost of investigating the problem at its then prevailing per incident billable rate. No repair or replacement of any Product or part thereof shall extend the warranty period as to the entire Product. The specific warranty on the repaired part only shall be in effect for a period of ninety (90) days following the repair or replacement of that part or the remaining period of the Product parts warranty, whichever is greater

2. EXCLUSIVE REMEDY: ACCEPTANCE: Purchaser's exclusive remedy and Dotworkz System's sole obligation is to supply (or pay for) all labor necessary to repair any Product found to be defective within the warranty period and to supply, at no extra charge, new or rebuilt replacements for defective parts

3. EXCEPTIONS TO LIMITED WARRANTY: Dotworkz Systems shall have no liability or obligation to Purchaser with respect to any Product requiring service during the warranty period which is subjected to any of the following: abuse, improper use: negligence, accident, lightning damage or other acts of God (i.e., hurricanes, earthquakes), modification, failure of the end-user to follow the directions outlined in the product instructions, failure of the end-user to follow the maintenance procedures recommended by the International Security Industry Organization, written in product instructions, or recommended in the service manual for the Product. Furthermore, Dotworkz Systems shall have no liability where a schedule is specified for regular replacement or maintenance or cleaning of certain parts (based on usage) and the end-user has failed to follow such schedule; attempted repair by non-qualified personnel; operation of the Product outside of the published environmental and electrical parameters, or if such Product's original identification (trademark, serial number) markings have been defaced, altered, or removed. Dotworkz Systems excludes from warranty coverage Products sold AS IS and/or WITH ALL FAULTS and excludes used Products which have not been sold by Dotworkz Systems to the Purchaser. All software and accompanying documentation furnished with, or as part of the Product is furnished "AS IS" (i.e., without any warranty of any kind), except where expressly provided otherwise in any documentation or license agreement furnished with the Product.

4. PROOF OF PURCHASE: The purchaser's dated bill of sale must be retained as evidence of the date of purchase and to establish warranty eligibility.

DISCLAIMER OF WARRANTY EXCEPT FOR THE FOREGOING WARRANTIES, DOTWORKZ SYSTEMS HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUI NOT LIMITED TO ANY AND/OR ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND/OR ANY WARRANTY WITH REGARD TO ANY CLAIM OF 1NFRINGEMENTTHAT MAY BE PROVIDED IN SECTION 2-312(3) OF THE UNIFORM COMMERCIAL CODE AND/OR IN ANY OTHER COMPARABLE STATE STATUTE. DOTWORKZ SYSTEMS HEREBY DISCLAIMS ANY REPRESENTATIONS OR WARRANTY THAT THE PRODUCT IS COMPATIBLE WITH ANY COMBINATION OF NON-V1DEOLARM PRODUCTS OR NON-DOTWORKZ SYSTEMS RECOMMENDED PRODUCTS PURCHASER CHOOSES TO CONNECT TO PRODUCT.

LIMITATION OF LIABILITY THE LIABILITY OF DOTWORKZ SYSTEMS, IF ANY, AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DAMAGES FOR ANY CLAIM OF ANY KIND WHATSOEVER, REGARDLESS OFTHF I FGAI THEORY AND WHFTHFR ARISING IN TORT DP CONTRACT. SHALL NOT RE GREATER THAN THE ACTUAL PURCHASE PRICE Of THE PRODUCT WITH RESPECT TO WHICH SUCH CLAIM IS MADE. IN NO EVENT SHALL DOTWORKZ SYSTEMS BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION, REIMBURSEMENT OR DAMAGES ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS OR FOR ANY OTHER REASON WHATSOEVER.

IMPORTANT SAFEGUARDS

1. **Read Instructions** - All the safety and operating instructions should be read before the unit is operated.
2. **Retain Instructions** -The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - All warnings on the unit and in the operating instructions should be adhered to.
4. **Follow Instructions** -All operating & user instructions should be followed.
5. **Electrical Connections** - Only a qualified electrician should make electrical connections.
6. **Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards
7. **Cable Runs** - All cable runs must be within permissible distance
8. **Mounting** -This unit must be properly and securely mounted to a supporting structure capable of sustaining the weight of the unit. Accordingly:
   a. Installation should be made by a qualified installer.
   b. Installation should be in compliance with local codes
   c. Care should be exercised to select suitable hardware to install the unit, taking into account both the composition of the mounting surface and the weight of the unit. Be sure to periodically examine the unit and the supporting structure to make sure that the integrity of the installation is intact. Failure to comply with the foregoing could result in the unit separating from the support structure and falling, with resultant damages or injury to anyone or anything struck by the failing unit,

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT EXPOSE COMPONENTS TO WATER OR MOISTURE	
	The lightning flash with an arrowhead symbol, within an equilateral triangle, is intended to alert the user to the *presence of non-insulated "dangerous voltage" within the* product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

SERVICE

If the unit ever needs repair service, customer should contact Dotworkz Systems +1 (619) 224-LIVE (5483) for return authorization & shipping instructions

UNPACKING

Unpack carefully. Electronic components can be damaged if improperly handled or dropped. If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. ***Be sure to save***

*1.T*he shipping carton and packaging material. They are the safest material in which to make future shipments of the equipment.

2. These Installation and Operating Instructions.

PRODUCT INSTALLATION
PRECAUTIONS – WARNINGS – ADDITIONAL INFORMATION
(RETAIN THIS DOCUMENT)

- ✓ For technical questions or product returns – call:

Dotworkz Customer Service (866-575-4689)

Assistance Available Monday thru Friday
8:00 AM to 5:00 PM (PST) A technician will contact you as soon as possible.

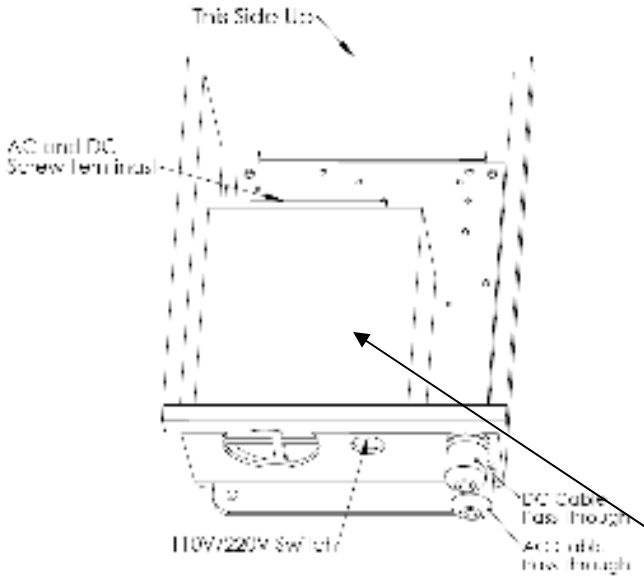
- Read and familiarize yourself with all instructions prior to installing enclosure to avoid damage to product, or harm to installer. Fully understand all wiring requirements before installation.

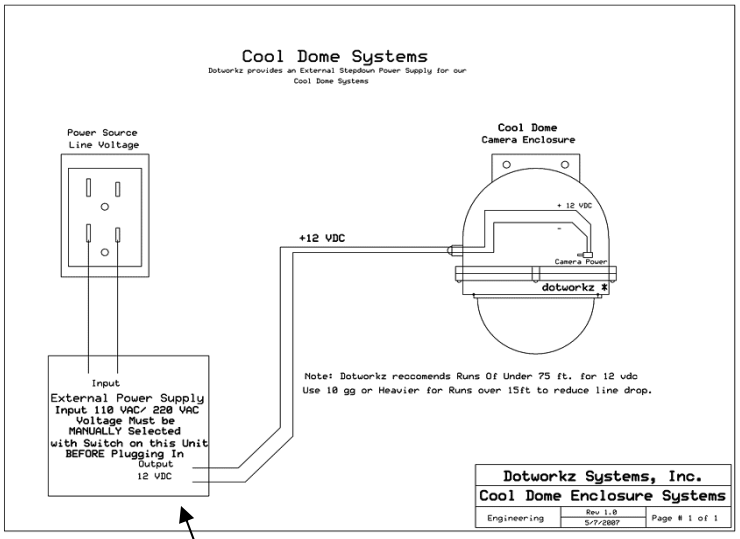
- The External Nut on All electrical wire feed Glands must be tightened to create a weather tight seal prior to putting enclosure in service. Failure to create this seal may result in water incursion into enclosure. This may lead to electrical shock, product failure and damage to electrical systems installed within enclosure, including but not limited to damage to camera, heater and blower circuitry, cooling circuitry and other systems installed in unit.

- All Latches on hinged lid must be secured to create seal on enclosure prior to putting enclosure into service. Failure to create this seal may result in water incursion into enclosure. This may lead to electrical shock, failure and damage to electrical systems installed within enclosure, including but not limited to damage to Power Supply circuitry and other systems installed in unit.

- Do not over tighten any Screws, Seals, or other fasteners on this unit. Failure to heed this warning may cause damage or failure to the enclosure.

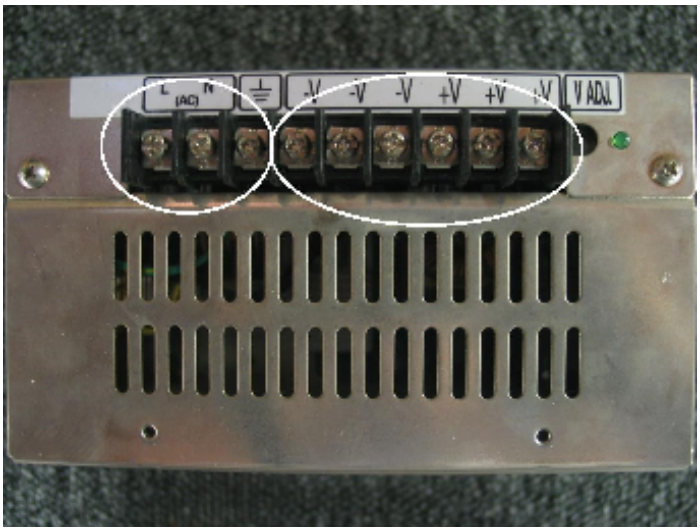
Installation Guidelines for CoolDome Power Supply Enclosure:





Never apply high voltage power directly to the CoolDome Enclosure Inputs.

The S-250-12 is pictured below on the side of its Terminal Block.



S-250 Power Supply

The internal circuitry of the D2 & Static CoolDome Enclosures were engineered for 12 VDC ***input*** ONLY. (24 VDC input Models available by special order.)
Each Cool Dome is supplied with an **external** high voltage power supply, the Dotworkz/ MeanWell S-250-12 Power supply, which converts the power to a low voltage 12 vdc output. This allows you to use high voltage to **Externally** convert to low voltage power to send to the CoolDome. It is a highly durable, heat tolerant, A/C to D/C Power converter.
Outdoor Nema Enclosure For Dotworkz CoolDome Power Supply, Product Code: NM-CDPS, was designed to allow this power supply to be mounted in outdoor locations. It comes integrated with the S-250 power supply & has a thermally controlled exhaust fan. Customer must Supply wiring for A/C input, and DC output. To reduce the effects of Low Voltage Line Drop, Please keep Low Voltage DC runs from power supply to the CoolDome as short as possible

Please be especially attentive to wire using the Proper Polarity, so as not to damage the internal components, or damage your camera within.

High Voltage A/C Typical Conventions, single phase:

Color	*Symbol*	*Description*
Black	L	Line Conductor, aka: "Hot" wire
White	N	Neutral Conductor
Green	G ,	Ground Wire, Chassis Ground

Low Voltage conventions, D/C, direct current:

Color	*Symbol*	*Description*
Red	V+	Positive conductor
Black	V-	Negative conductor

AC Power Hook- Up

The input to the provided external power supply follows standard A/C wiring conventions, and is to be mounted nearby indoors, or outdoors in a weather rated enclosure. . It can be powered by single phase 110 VAC, or 220 VAC. It must be manually set to the correct input voltage range (110 VAC *or* 220 VAC), by moving and setting the slide switch on the side of the power supply, ***before*** powering up.

A Nema rated outdoor power supply Enclosure (NM-CDPS).

The output of the S-250-12 external power supply, can be adjusted up and down 10%. It is recommended to keep the voltage at the enclosure adjusted to at least 11.5 vdc, but no more than 13.0 vdc. By running the enclosure higher than 13.0 vdc may cause premature component failure. It is best to check and tune the voltage at the CoolDome with a voltage meter at the time of installation, and use the adjustment screw, located on the S-250-12, to the right side of the terminal screws, to raise or lower the output voltage.

For all outdoor wiring, always use an outdoor rated wiring, or wiring in weather rated conduit, out from power supply, into the Cool Dome. Follow all local and applicable wiring and safety standards.

Low Voltage Wiring Hook Up

Please **keep D/C wire runs short**, to reduce low voltage line drop. Also, the suggested wiring gauge table is provided to further prevent low voltage line drop, and to guide you in selecting the proper wire gauge for the dc run from the power supply to the cool dome.

The two ways to reduce this voltage line drop, is keep the DC power run as short as possible. The second way is to use as heavy gauge wire as feasible, to reduce low voltage resistance, and thus voltage drop, in the wire conductors. Note that the voltage drop will only show on a long wire run under near fully loaded conditions. Unloaded voltage measurement will show very little voltage drop at enclosure. Only when the CoolDomes thermostat engages, and cooling unit is running, will the wiring be loaded to show full line drop across wiring run.
(See Table 2 on next page for wire AWG guidelines for wire run lengths).

Inside the Static CoolDome, we have provided a convenient white Screw cage clamp style terminal blocks to wire the 12 vdc low voltage wire run (customer supplied wiring), from the external power supply, to connect the power to the static CoolDome. Remember low voltage wiring color coding convention: positive (V+) +12 VDC (red), and the 12 vdc Negative (V-) (black) terminal. Please strip the insulation off the last 3/8" of the wires and fasten wiring securely to terminal, using a small blade screwdriver to tighten the caging mechanism on the terminal blocks.

See CoolDome User Manual for Line Drop Tables, or visit website line drop website as follows.

A non-affiliated link that is helpful for line drop calculation is below. This is handy to quickly calculate wire drops on low voltage circuits.

http://nooutage.com/vdrop.htm

Dotworkz Customer Service

For technical inquiries, Product Support, or product returns, Contact:
Online customer service (8:00 AM to 5:00 PM, PST):

Support@dotworkz.com

View latest Manuals and Support Materials from our Website:
http://www.dotworkz.com/customer_service/manuals_datasheets.asp

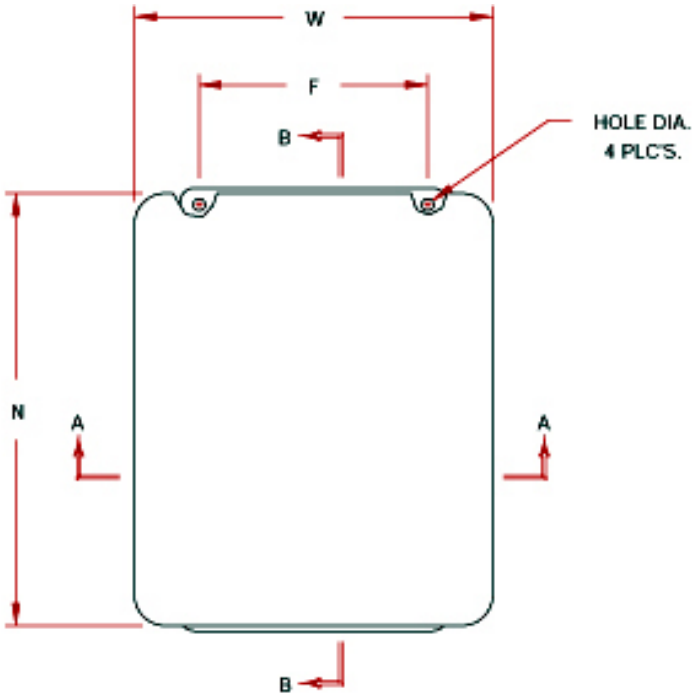
Or, by phone in the USA, (7:30 AM to 4:30 PM, PST):
Dotworkz Customer Service Line:

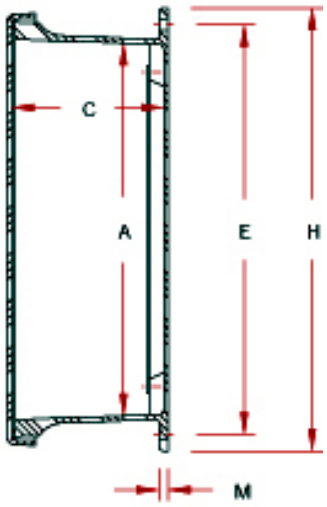
1-866-575-4689

Phones outside USA, please call:

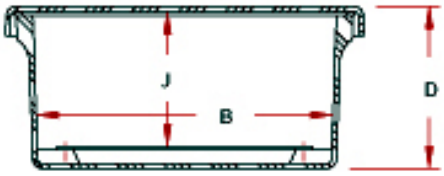
+1-619-224-5483

Dimensions & Specifications

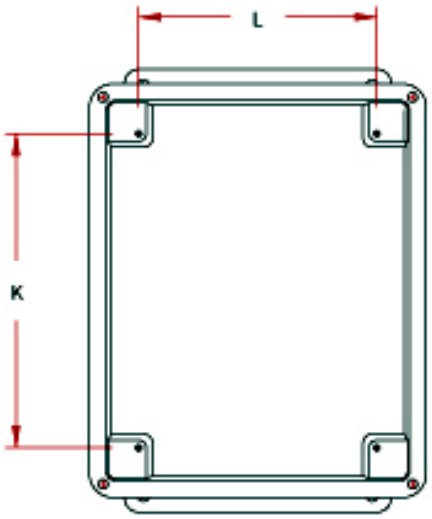




SECTION B-B



SECTION A-A



FRONT VIEW
WITHOUT COVER

Overall	Inside	Mounting						Hole	Enclosure
H x W x D	A x B x C	E x F	J	K	L	M	N	Dia.	Weight
11.62 x 9.41 x 4.25	9.73 x 7.73 x 3.98	10.75 x 6	3.5	8.25	6.25	0.25	11.35	0.31	7.5 lbs.
(295 x 239 x 108)	(247 x 196 x 101)	(273 x 152)	(89)	(209)	(159)	(6)	(288)	(8)	